shell, the shell having fins on its back surface extending toward the carrier, and fin channels provided by the carrier, thus creating a complex fluid cooling network for passage of heat transfer fluid therethrough. The precision manufacture required for the shell and carrier combinations of this nature is expensive. Proper alignment and cooperation of the fins and fin channels in manufacture is also complex.

Other examples of liquid cooled molds produced in the past are shown in U.S. Patent No. 4,072,456 issued to Appel et al. and U.S. Patent No. 2,240,300 issued to Hanna et al. Again, the molds are complex and expensive to produce.

SUMMARY OF THE INVENTION

The present invention alleviates some of the above mentioned difficulties as well as others. The present invention provides a mold of simple construction having a nickel vapour deposited nickel cavity shell requiring no hand finishing, and provides for a simple method of cooling or heating.

According to the invention, there is provided a mold assembly for use in a plastic blow mold. The mold assembly comprises a mold cavity shell made by nickel vapour deposition (NVD). The mold cavity shell has a cavity portion including a front face, a rear face and peripheral edge portions. The front face defines a cavity in the shape of a portion of a product to be molded. The mold has coplanar peripheral side portions attached to the peripheral edge portions, the side portions defining front surfaces adapted to mate with corresponding surfaces of a mating mold cavity shell to define the product to be molded. A mold holder is located rearwardly of the mold cavity shell. Means are provided for releasably connecting the mold holder to the peripheral side portions. Also, the mold holder defines an inner wall spaced from the mold cavity portion to define a heat transfer passage between the inner wall and the cavity portion.

BRIEF DESCRIPTION OF THE DRAWINGS

Preferred embodiments of the invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a perspective view of the rear face of a preferred embodiment of a mold cavity shell according to the present invention;

Figure 2 is a perspective view of the front face of the mold cavity shell shown in Figure 1;